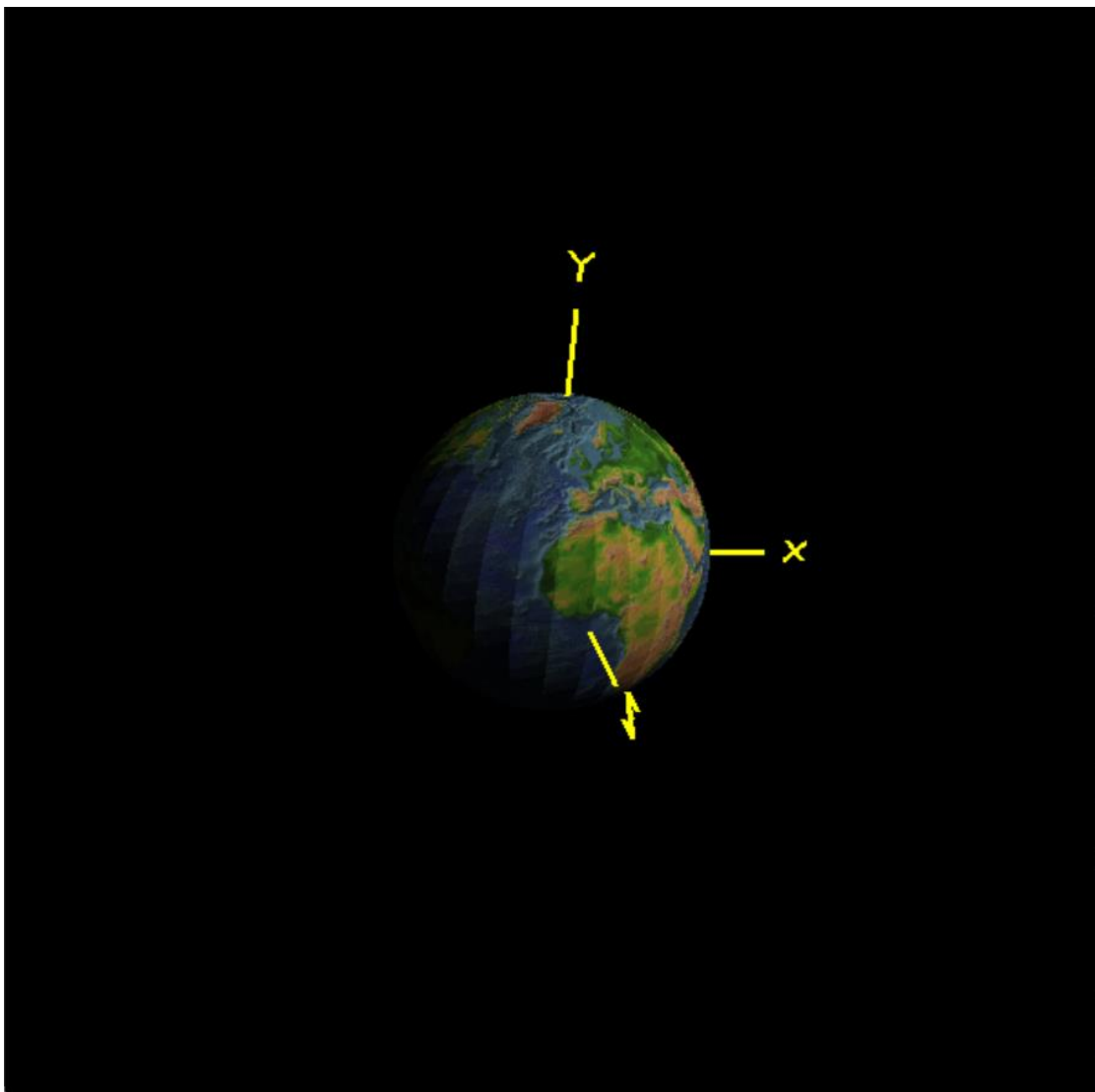CS550 Assignment Five

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The program described is a space simulation tool that creates and manipulates textured planetary bodies. It uses a "planet" structure to store essential information about each planet, including its name, texture file, scale, display list ID, unique interactive key, and texture object ID. The program dynamically loads textures from bitmap files and applies them to a spherical model of each planet. Users can switch between different rendering modes through keyboard input, enabling or disabling textures and lighting. In texture mode, planets are rendered with their unique textures, while the light mode adjusts lighting effects to enhance texture appearance. The simulation also features movable light sources for dynamic lighting effects and scales planets according to their real-life size ratios for added realism.

Link: CS550 Assignment Five - OSU MediaSpace (oregonstate.edu)